Flightfax

ARMY AVIATION
RISK-MANAGEMENT
INFORMATION

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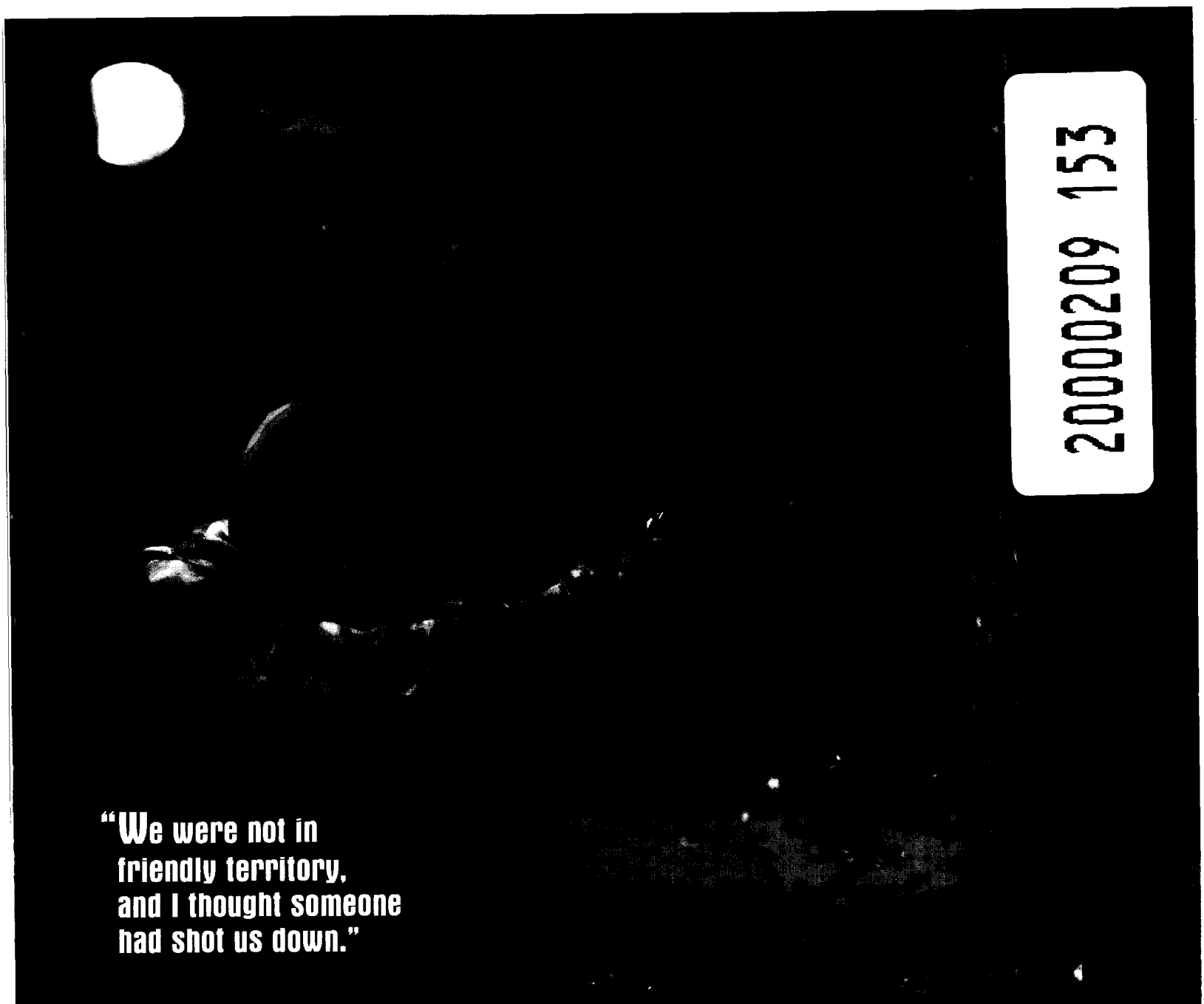


"We were not in friendly territory, and I thought someone had shot us down."

MISDIAGNOSIS CAN BE FATAL

"It was dark inside the OH-58D, but I could see my co-pilot moving around. I called to my co-pilot to close the throttle as I turned off both battery switches. I could not reach the fuel valve handle. We were not in friendly territory, and I thought someone had shot us down. It was time to exit the aircraft.

I unbuckled my seatbelt and fell forward. I kicked a hole in the right front windscreen and crawled out. There were sparks coming from the aircraft. I yelled to my co-pilot to get out but he couldn't. I went back inside, unbuckled him, and pulled him out. We ran to the tree line.

After reaching the tree line, I told my co-pilot to chamber a round in his 9mm pistol. We then faced out to pull security as the AH-64 circled above us.

Most fields [here] are mined, and the only thing I could think of was getting out of there. But, I was glad the Apache was providing security for us. It was on short final for the field when I pulled out my survival radio.

When the aircraft landed in front of us, my co-pilot and I ran to the Apache and hooked up for emergency extraction. When fully strapped on I gave the back-seater the thumbs-up. The front-seater advised me to wait for the MEDEVAC aircraft because the area was clear and he would continue to pull security. My co-pilot and I went back to the tree line to wait.

At this time I was not feeling very good. I knew I was injured, and the situation was getting worse. It seemed like forever before the UH-60 Black Hawk arrived."

– recounted by the PC.

Misdiagnosis can be fatal

I am not speaking from experience, but I can only imagine that in-flight emergencies are the most stressful events in a pilot's career. The Army ensures that we pilots are, in the very least, minimally knowledgeable about how to deal with these emergencies. Annual APARTs and simulator flights help us to master the underlined and non-underlined steps of an emergency procedure, but most might agree that we are being tested only on the memorization of these procedures after the emergency has been identified. Diagnosis of emergencies (malfunction analysis) is a rarely taught skill, and it usually is left to the individual pilot to keep his diagnosis skills sharp.

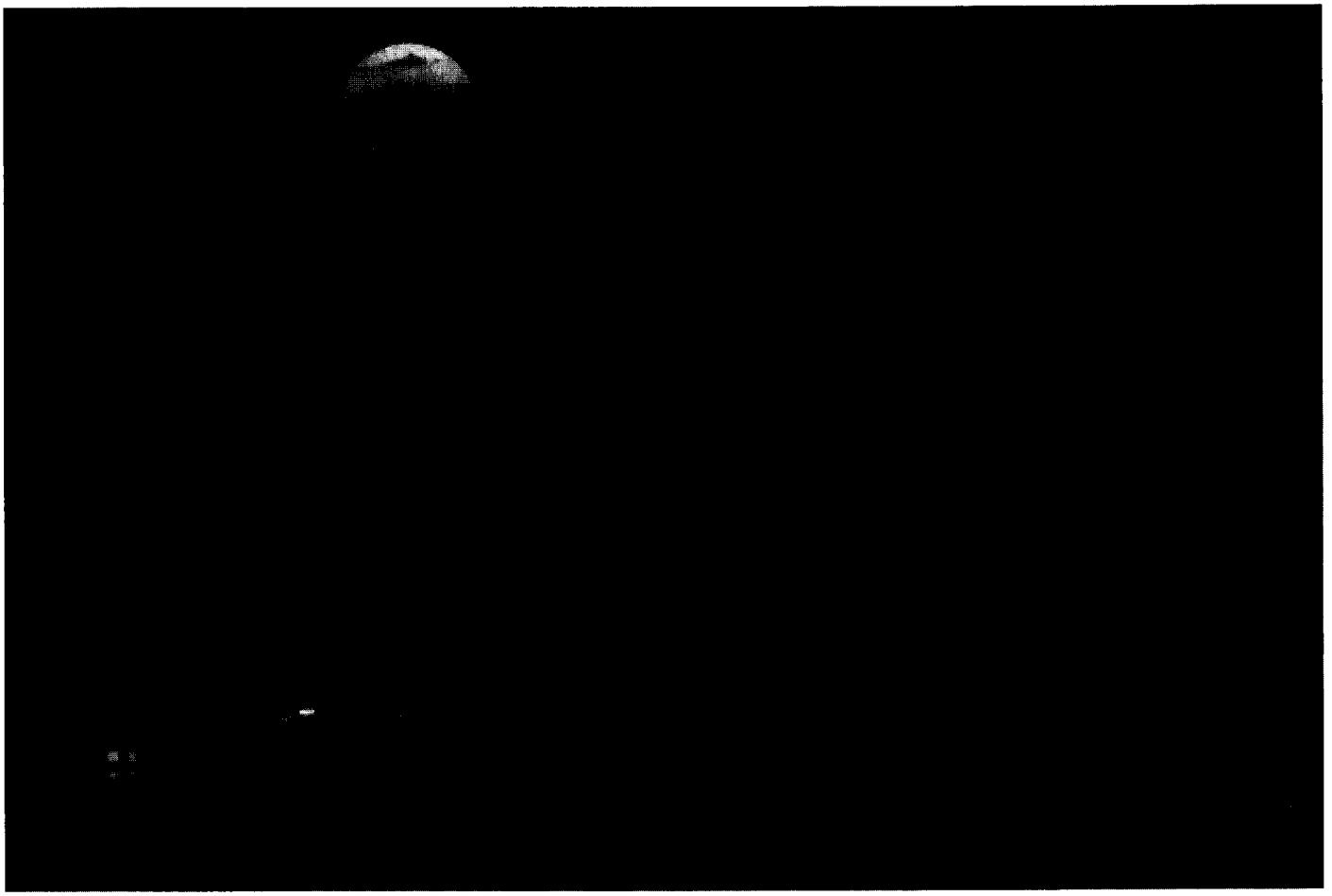
Unfortunately, misdiagnosis of emergencies is very likely to cause harm. We have all heard the stories about misdiagnosing illuminated firelights as a real fire, causing a panicked descent from altitude. Or the shut-off of the wrong engine power lever or fuel control when it was the other engine that should have been shut off. These are not rare events. In fact, the 1997 "Wrong Engine" study, prompted by a UH-60 accident that involved misdiagnosis, brought out that misdiagnosis was one of most common pilot errors.

To illustrate this point, let's take a closer look at a recent OH-58D(R) accident. The PC has already described the aftermath of his accident for us. Without the benefits of the accident investigation results, the PC recounts the sequence of events leading to the accident. Then the US Army Safety Center Accident Investigation Board gives you the facts behind the accident and why the PC was led to believe the diagnosis the PI gave him.

From the PC – The Accident

"The aircraft was at 300-350 feet AGL, at 55-60 knots, with about 52% torque applied. I was wearing NVGs, with my mast-mounted sight page on the multi-functional display when I saw some flashes within 2 km. I turned my attention outside the aircraft. I felt the craft descend and looked inside. I asked my co-pilot, "What is the problem?" He said, "engine out!" as he lowered the collective.

When I saw the ENGINE OUT message, I quickly came



on the controls. I ensured the collective was full down and put the aircraft in an autorotational profile. My rotor speed (Nr) was in the yellow and dropping. There was no engine noise, no engine out audio, and no low rotor audio. I had no power turbine speed indication (NP) and no turbine gas temperature (TGT) indication. I knew there was something seriously wrong as I fell quickly to the ground. I headed for the field off the nose of the aircraft. The Nr appeared to stabilize, and I knew this would be my last chance to scan the instruments. I made a mayday call to my wingman while simultaneously decelerating the aircraft. At the altitude I thought was correct, I applied collective to cushion the landing.

Throughout the crash sequence I stayed on the controls. My shoulder harness locked as my head snapped forward. The NVGs came off my helmet, and the battery pack came forward as the cord ripped through the visor mount. The cyclic hit my kneeboard on my leg and bent it. After this very violent sequence, the aircraft came to a stop on its right side."

From the Accident Board - What they didn't know.

Unfortunately, the crew misdiagnosed their emergency. It is true that the aircraft generated an ENGINE OUT warning. Based on that warning, the pilot on the controls entered an autorotation. The PC, who was looking outside the aircraft, confirmed the ENGINE OUT warning and ensured that the collective was down and the throttle was open. He then began looking for a place to land. Fortunately, the crew was flying over an open field at the time. They executed the autorotation, and although the aircraft was totally destroyed, the crew sustained only minor injuries.

They responded to an erroneous ENGINE OUT

warning without confirming the condition with other indications. The engine and all systems were fully operational, confirmed by data derived from the Map Data Unit. As the old saying goes, "they autorotated a perfectly good aircraft." This is not the first instance of an erroneous ENGINE OUT warning in the OH-58D(R). There have been at least two other reported incidents of this malfunction that did not result in an accident.

This story could have ended tragically. Had the crew been flying over mountainous or wooded terrain at the time of the accident, they might not have been around to tell the story. Their misdiagnosis of a perceived emergency situation might well have cost them their lives. What's the lesson learned? Under "Engine Malfunction - Partial or Complete Power Loss", the OH-58D operator's manual contains a warning that reads:

> **Do not respond to the RPM audio and/or display on the MFD and/or MPD without first confirming engine failure by observing one or more of the other indications. Normal indications signify that the engine is functioning properly and that there is a malfunction in the engine or rotor sensing system(s).**

If you fly this aircraft, you already know that the OH-58D is an unforgiving aircraft if you delay lowering the collective in the event of an engine failure. Understandably, most pilots will not hesitate to enter an autorotation. How much time you have to confirm this condition with other indications is a function of your experience level and your particular flight profile at the time the incident occurs. How would *you* ensure that the engine has failed? There is a difference between memorizing your emergency procedures and understanding them.

A Complex Situation

This is not an attempt to find fault with the aircrew. Every Kiowa Warrior pilot is aware of the marginal autorotative characteristics of the aircraft. The OH-58D's low-inertia rotor system requires aircrews to rapidly lower the collective to prevent a dangerous and potentially fatal loss of rotor rpm. Add to the equation the fact that you might be flying in the caution area of the height-velocity diagram, in a hostile-fire area, at night under NVGs, and at 400 feet AGL. Additionally, pilots don't routinely train touchdown autorotations, especially NVG autorotations. As a result, you should expect to have very little time to "confirm the engine failure."

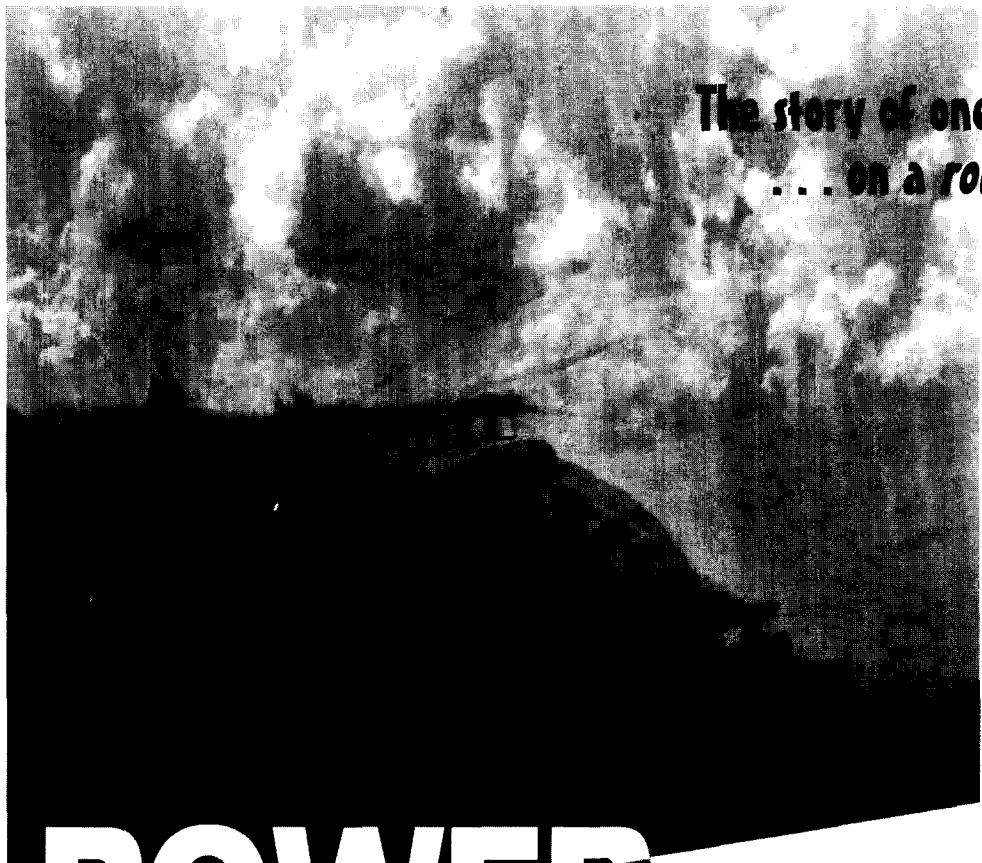
The complexity of the accident issue is clear: How can OH-58D pilots be expected to follow the guidance of the warning if the mission profile and aircraft envelope are working against them? Despite this paradox, the criticality of correct diagnosis of emergencies cannot be over-emphasized.

Understanding Emergency Procedures

In an emergency situation, your survival may depend on a rock-solid understanding of emergency procedures. This means much more than rote memorization of the tasks. It means understanding the possible ways that a given problem can manifest itself, i.e. correct diagnosis of the emergency. Understanding emergency procedures also means knowing what happens to the aircraft with every action you take. This understanding, coupled with effective crew coordination, will ensure that you accurately diagnose the problem and react accordingly.

What is the most important consideration in the event of an emergency? The textbook answer is aircraft control. Most of us would probably agree that aircraft control is the key to survival, which is the real overriding concern. If confronted with an emergency situation, are you prepared to properly recognize the emergency, react, and survive?

—CPT Stace Garrett, US Army Safety Center, DSN: 558-9853, Comm: (334) 255-9853 E-mail: garrets@safety-emh1.army.mil. Thanks to the PC, who shall remain anonymous, for providing his account of the events.



The story of one Blackhawk crew . . . on a *routine* mission.

POWER MATTERS

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Available January 2000 at these convenient locations

Visit the Army Safety website http://safety.army.mil.and follow the links.

Download POWER MATTERS Program of Instruction with simulator scenario

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POC: Rebecca Nolin, nolinr@safety-emh1.army.mil,
DSN 558-2073, comm. 334-255-2073

RELIVE THE MISSION

Flying a disaster-relief mission loaded with ERFS tanks, the crew embarks on a routine mission. But as events unfold, their flight turns into one that is anything but routine.

In a unique first-person account, the PC of the aircraft looks at the different puzzle pieces that made up the accident.

Next, we hear from a Safety Center investigator, a DES Standardization Pilot, and a Human Factors psychologist, as they focus on three specific problem areas: Power management, Crew coordination and Risk management.

In conclusion, BG LaCoste, Director of Army Safety, highlights current problems areas in the Army dual-engine helicopter community.

You won't want to miss the wealth of information provided in this must-see video.

FLY THE MISSION

Download the Program of Instruction that accompanies this video from our web site http://safety.army.mil. As an added bonus, it contains a simulator scenario - place yourself at the controls and fly your way out of trouble.

Flying in the Snow

It's time to talk about snow. In some parts of the world, it's been here for months. In others, it's just getting ready to fly. Whichever is the case for you, it's never too late to get up to speed on winter flying.

Units that haven't reviewed training in cold-weather flying should do so immediately. Once an aircrew is involved in a whiteout during an approach, or experiences spatial disorientation over a snowy field, it's too late to talk about training.

Inexperience and lack of recent training are frequent contributors to snow-related accidents. If you are new to an area of frequent snows, get into FM 1-202: *Environmental Flight*, as well as all the local SOPs. Also ask questions of local safety folks and instructors—lots of questions.

Even if you have lots of winter flying experience, a few months time in temperate weather can erode winter flying proficiency. Remember, overconfidence can lead to an accident, just as surely as inexperience. Consider the following accidents:

Blowing Snow

The PC was confident in his abilities, and with good reason. He had more than 5,500 hours of military flying time, more than 2,400 in the UH-1.

He was at the controls when the Huey approached the designated landing area. There was a 400-foot ceiling, partial obscuration, snow, fog and estimated winds of 210 degrees at 8-10 knots. Using techniques outlined in FM 1-202 for snow operations, the PI terminated the approach at a high hover. He then maintained the hover for 1-2 minutes in order to blow away the new snow, which had freshly fallen on top of the 2 feet of crusted snow already covering the landing site.

When the Huey landed on the crusted snow, the rear of the skids broke through the crust, putting the aircraft in a nose-high, tail-low attitude. When the crew chief reported that the tail was only 2-3 feet above the snow, the pilots decided to reposition to another spot to level the aircraft. Because the PC had a good visual reference on a grassy area outside the right window, he took over the controls.

As the PC picked up to a 3-foot hover to reposition to a grassy area, he lost his visual reference in blowing snow. The aircraft began drifting left, and the tail rotor struck trees. As the PC attempted to set the aircraft down, the forward portion of the left skid struck the snow-covered ground, and the aircraft rolled over onto its left side.

The crew attempted to reposition their aircraft without a plan on what to do if they lost visual contact with the ground. The PC probably should have executed a take-off when he lost ground reference.

Lesson learned: A take-off under these conditions amounts to an instrument take-off. Practice ITOs until they are routine maneuvers.

Snow-Covered Landing Areas

It was winter, and two flights of five UH-60s were on a troop insertion mission to unimproved

landing areas. In one flight, the unit operations officer was piloting Chalk 3. Because of his unit duties, he had flown only 17 hours in the preceding 4 months. Moreover, he had not been able to attend mandatory unit training in which snow-landing techniques and procedures were reviewed, nor did he attend make-up classes or engage in hands-on snow landing operations training.

The flights were proceeding normally with 7 miles visibility and 1,000-foot ceilings in scattered snow showers. Then the two flights separated and began a series of false insertions.

Chalk 3's flight encountered a snow shower as they began a formation approach. Visibility was reduced to about a mile. The LZ was a large, open, snow-covered field with an apparent upslope in the direction of the landing. The crew of Chalk 3 could see a large amount of snow circulating through the rotor systems of the two aircraft ahead of them.

The pilot of Chalk 3 selected a touchdown point downslope and to the left rear of the lead aircraft. Using the upslope aircraft and distant tree lines as visual references, the pilot made his approach. A snow cloud enveloped the aircraft as effective translational lift was lost about 20 feet above the ground, with a left quartering tailwind of 15-25 knots.

The pilot decided to continue the approach without outside references and reduced power to put the aircraft on the anticipated upsloping terrain. In a complete whiteout condition the UH-60 touched down hard on a combination upslope to the front and downslope to the left. The helicopter rolled over and came to rest on its left side.

Several factors contributed to the difficulty of landing at this site:

- The flight was landing downwind to an upslope.
- The aircraft were landing during a snow shower to an LZ with very loose, dry snow.
- There were only limited stationary visual clues.

The worst thing that happened was that the pilot continued the approach when he lost visual contact with his ground references. He had to monitor two slopes and his position simultaneously. This would be a difficult task even if the pilot had a wealth of recent snow experience, which was not the case.

Moreover, the rate of descent was excessive, even if the approach had been to level terrain. FM 1-202 states that an approach to the ground should not be made in dry powdered snow unless the touchdown area is known to be level and free of obstructions.

In this case, the pilot was aware of both the slope and the looseness of the snow. However, he was not aware of his downwind condition.

Lesson learned: Approach and go-around planning are essential for any formation flight. They are crucial in snow environments. Planning should include:

- Instructions to execute a go-around if visual contact with ground references is lost, or if it becomes apparent that visual contact will be lost.
- Timing and spacing aircraft into LZs to reduce effects of blowing snow.
- Specific go-around instructions in pre-mission briefs (what direction to turn, where to land on subsequent approaches, and takeoff procedures.)

OTHER SNOW HAZARDS

One of the most dangerous snow environments just may be the main airfield. The large open areas found at most airfields do not provide the contrast and definition needed to maintain orientation, especially when snow starts circulating through rotor blades.

Moving around the typical airfield is a little easier when you can "air taxi". When you are cleared to do so by ground control, just remember to keep a good scan going to keep from inadvertently descending.

SUMMARY

Many aviators have their own ideas about how to mitigate the risks associated with blowing snow. As part of the winter academic program, it may be useful to survey aircrews to determine which hazards they consider the most severe, and evaluate the effectiveness of the controls that are in place. From such a survey, necessary upgrades to winter training plans and development of new controls can be put in place.

Winter has been a regular on the calendar for a long, long time. There's nothing we can do about that, even if we wanted to. In fact, the very predictability of changing seasons gives us time to plan our training for the different kinds of flying problems each season brings. If you haven't already done it, get your refresher training, review FM 1-202, and be alert to the hazards associated with winter flying.

—Adapted from CW5 (Ret) Bob Brook's original article that appeared in *Flightfax*, August 1997, Vol. 25, No. 11.

Above the Best

Since the dawn of this century, simply mentioning the fact that you are a military pilot often makes you the center of attention . . . even in the company of other soldiers or professional people. It is a heady feeling that strokes the ego, leaving you rightly proud of your accomplishments and proud of knowing you have joined an elite group, the long line of Army Aviators. You are one who can proudly wear the Silver Wings, one who can truly identify with the timeworn phrase, "Above the Best."

You could be doing a thousand other things with your life. Instead you have been chosen to do something extraordinary, something that demands intelligence, meticulous planning, and continuous, career-long, thoughtful effort in order to count yourself alive and successful at the end of the day. It is the stuff of legend, something highly desired and greatly treasured and, by nature, it is fun and exciting! No honest aviator would deny that. We probably wouldn't tolerate many of the hardships if it were otherwise.

That exhilaration comes at a price. Sadly, not all of us are willing to make that sacrifice for this great privilege. We have had some frightful incidents and accidents in the recent past because of that unwillingness. It is time to look at our individual attitudes, our professionalism, and the integrity of our actions.

Perception

You've heard it your entire career . . . you are a soldier first and always. What you do as an aviator is subordinate to that singular, distinguishable fact. It's that simple and it's that profound. This can't be overemphasized! If this is not your perception, then you need to seriously consider leaving the Army. There must be an unwavering commitment to this principle. Anything less is unacceptable and is grounds for dismissal!

Attitude

The great SPs I have known and worked with placed attitude preeminent on their scale of required aviator "skills." Among the many attributes and skills needed to be a proficient aviator, most can be strengthened or enhanced through study, practice, and guidance—with one notable exception, attitude. It is the age-old story, I can teach you to fly an ILS or to execute a VMC approach, but I can't fix your attitude. Only you can do that! It's a matter of the heart and only you can effect authentic and lasting change. If you have chosen to be a rogue aviator, the type who holds rules and guidelines in disdain, there is little hope of forcing you into a different mindset. Worse still, you simply can't be trusted with millions of dollars worth of equipment, the dependency of others on your mission performance, and most importantly, the priceless lives of your fellow soldiers.

Integrity

Can you be counted on—counted on to be realistic about your own or the crew's shortcomings, to maintain the knowledge necessary to be a professional aviator, and to be dedicated to the Army mission, whatever that might be on a particular day? Will you do the right thing when no one is watching? Regardless of the strength or weakness of the "command climate," a professional soldier and aviator will not violate the implied trust of those he serves. Vigilance must come from within; it should not need to be forced from without.

Duty and Honor

Some have snickered at the statement of the seven Army values, yet they form the glue that bond soldiers together in peace and, most especially, in war. These values are intangible elements, but they manifest themselves in very tangible consequences, good and bad, gratifying and tragic.

It is imperative the Army Aviation community solve its own problems without outside meddling from those who won't likely understand our unique requirements. Recent issues of Flightfax have made us aware of the consequences of disobedience and undisciplined flight. I'm encouraging you to aspire to greatness, to live on the other side of the fence from the rogue aviator, the one who wreaks havoc and destroys lives. Perform your flight, your mission, with honor and distinction.

Flying is fun and garners much personal attention, but it must be embraced as a sacred trust, and when that trust is violated disciplinary action must be swift and unwavering. The sheer joy of flight properly executed carries no guilt and is exhilaration undefiled. In the daily performance of this privileged assignment we must remain duty-bound and committed to integrity of action.

Contributed by CW4 William Barker, Ft Rucker, AL, E-mail: barkerw@rucker.army.mil, DSN 558-1076, Comm. (334) 255-1076

U.S. Army Safety Center Points of Contact

DSN 558-xxxx Commercial 334-255-xxxx http://safety.army.mil

ACCIDENT INVESTIGATIONS/SYSTEMS
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ARMY NATIONAL GUARD LIAISON
LTC Shea 1186

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Accident briefs

Information based on *preliminary* reports of aircraft accidents

AH64

Class C
A series

■ On post-flight, pilot found dent in tail rotor blade and hole punched in stabilator. Maintenance discovered one screw missing from tail rotor gearbox cover. The backing nut had failed and allowed the screw to come out, damaging the tail rotor and stabilator. The rotor blade and backing plate were replaced. The stabilator was repaired.

Class D
A series

■ The 30mm gun would not fire during Table VIII night gunnery. The aircraft returned to FARP. The bolt carrier was found to have been damaged by a chain screw that had worked loose in flight. The index drive rotor, sprocket and a pin were also damaged due to the sudden stop.

■ A crew chief noticed the UHF antenna beneath the aircraft was broken after an ATM training flight. The missing antenna piece was found buried in the ground in the area where slope training had been conducted on the previous flight. A minor crack was also found on the doppler radar altimeter antenna fairing.

Class E
A series

During hot refueling, refueler notified pilot of fuel leak. Aircraft was shutdown. Maintenance determined fuel system was overpressurized.

CH47

Class C
D series

■ Both generator shafts were found damaged. Transmission damage is also suspected due to sudden stoppage.

E series (MH-47)

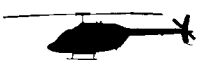
■ During NVG mission training, aircraft's aft rotor system contacted trees during "confined area" approach/landing. Aircraft was repositioned, and a post-flight inspection found damage to all 3 aft main rotor blades.

Class D
D series

■ Crew was hovering with a 105mm Howitzer slingload. While at a hover with the slingload approximately 10 ft off the ground, one sling leg came loose. Crew set load on the ground and howitzer rolled onto its side resulting in damage to the equipment. Crew released sling from the hook and landed without further incident. Investigation revealed a flaw in the rigging by the supported unit allowing the chain links to slip off of the mounting point.

■ Squealing sound heard coming from forward transmission area during run-up. Aircraft was shutdown and driveshafts were lubricated. Same sound occurred during second start. No. 1 flight-boost pump was replaced.

OH58



Class A
C series

While in contour flight at 90 knots and approximately 50 feet AGL, the aircraft struck power wires in its flight path. The aircraft was destroyed in the crash. The crew escaped uninjured.

Class B
D series

■ While conducting FADEC manual throttle operations, crew reported NG/NP overspeed (128/124% readings respectively). Aircraft was landed without further incident.

Class C
D series

■ After pushing start button pilot noticed that the ignition circuit breaker was not in. Pilot then aborted start and pushed ignition circuit breaker back in. After waiting about 1 minute and 20 seconds before attempting a second start, pilot asked a crew chief to see if the fuel had drained from the combustion chamber. Crew chief reported fuel did drain and formed a puddle on the ground. The pilot then attempted second start. When start button was pushed TOT went to 1000 degrees. Pilot aborted start and maintenance was called.

■ During hover taxi to refuel, crew was notified by ground they appeared to have an open cowling. After landing crew observed damage to the right engine door that had opened in flight. Postflight inspection revealed that only one dzus fastener had been secured. Aircraft was released for one-time flight to home station.

■ During simulated engine failure at altitude PI reportedly exceeded engine torque limits at 132% for 1 second (Limits are 131% for 2 seconds.) Aircraft landed without further incident.

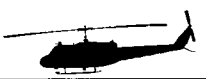
Class D
C series

■ During training autorotation, aircraft landed hard, bounced into air one time, touched down a second time in a slightly nose-high attitude, and came to rest upright. Postflight inspection revealed damage to drive shaft, isolation mount, crosstube, Wire Strike Protection System (WSPS), and tailboom.

Class E
C series

■ General segment light came on while aircraft was on the ground at engine idle. Aircraft was shut down. Maintenance found failed voltage regulator.

UH1



Class A
H series

■ Aircraft discovered just off runway shortly after radio contact with tower was lost. Aircraft was in final phase of second go-around. Two fatalities, two major injuries. Aircraft destroyed.

Class E
H series

■ Idle detent failed to engage on engine start. During engine shutdown, strong smell of electrical burning was

For more information on selected accident briefs, call DSN 558-9855 (334-255-9855). Note: Information published in this section is based on *preliminary* mishap reports submitted by units and is subject to change.

noticed and emergency shutdown was performed. Odor came from burnt-out search light transformer.

UH60

Class C
A series

■ Post flight maintenance revealed damage requiring replacement to main rotor blades and spindles. Lightning strike in flight suspected. Crew did not detect lightning strike.

■ Tool was left in deice ring. During run-up for main rotor blade tracking, tool flew off and struck one blade, resulting in leading edge damage.

■ Crew heard loud bang on exterior of aircraft, along with CE observing what he thought was a bird exiting through the main rotor system. In-flight control check performed with normal response. Aircraft continued to destination. Post-flight revealed Blue Main Rotor blade dampener had failed and rotated on its mount. The BIM indicator, damper body, blade strap assembly and main rotor blade were damaged. Bird strike suspected.

Class D
A series

■ Aircraft was prepared for flight. While Test Pilot was getting flight information, maintenance personnel performing 10-hour maintenance inspection of aircraft failed to secure tail rotor driveshaft covers. Tail rotor driveshaft covers came open in flight. Ground personnel approached the aircraft at a hover, getting the attention of the crew chief but not the pilots. Aircraft was notified by radio.

Class E
A series

■ No. 1 engine was operating normally. While starting No. 2 engine, No. 1 engine starting light came on. Smoke entered cockpit and cabin. White wire to starter motion transducer was found to be broken. Further inspection revealed oil on engine deck and firewall. Starter was replaced.

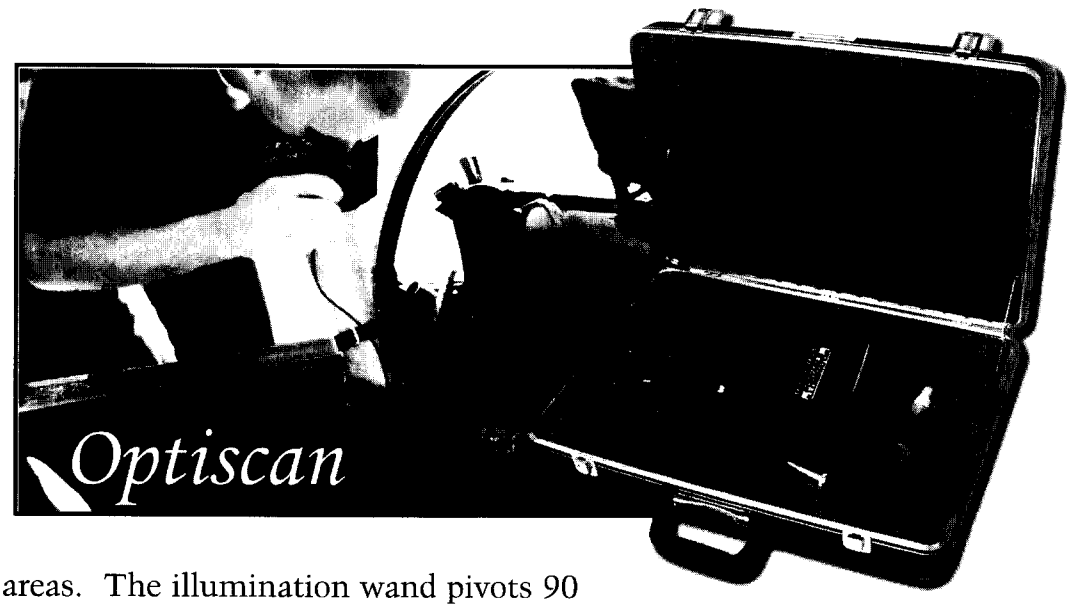
C12

Class D
F series

■ During post flight inspection the maintenance personnel found damage to propeller blade tip.

Did Santa bring you one?

The Optiscan 2000 Inspector, NSN 2920-01-455-5480, provides maintenance personnel with the capability to inspect areas that can't be seen with the naked eye. The Inspector allows you to reach into small places and observe defects in equipment or find objects without the need to disassemble components. This can be invaluable in inspecting aircraft cockpits, engines, and closed electronics compartments.



The Inspector is a fiber optic instrument on an illuminated wand connected to an eyepiece. The eyepiece and wand are separated by four feet of fiber optic cable to allow you to see into tight areas. The illumination wand pivots 90 degrees to allow you to look behind and around objects which would normally obstruct your view. No more disassembly of components to complete a visual inspection. The eyepiece can be focused and provides 2X magnification.

For even greater magnification, check out NSN 2920-01-460-0429, which offers three times the enlargement capability of the Optiscan 2000. If Santa didn't bring you one, check with Stan Dillon, Defense Supply Center, DSN 850-2899, (614) 692-2899.

Aviation messages

Quarterly list update - Have you read these?

Aviation safety-action messages

October 99

AH-1-00-ASAM-01: Verification of Time – T-53 Engines
AH-64-00-ASAM-01: Inspect M/R Strap Pack Outboard Bolt
UH-1-00-ASAM-01: Tail Rotor Blade Life Extension
UH-1-00-ASAM-02: Verification of Time – T-53 Engines

November 99

AH-1-00-ASAM-02: T53 Chunk Screen Installation
AH-1-00-ASAM-03: Link Assembly
UH-1-00-ASAM-03: T53 Chunk Screen Installation
UH-60-00-ASAM-01: Inspect Main Rotor Hub Assembly

December 99

AH-64-00-ASAM-02: M/R Drive Plate Bolts/Holes
UH-60-00-ASAM-02: Cyclic Stick Wiring Bundle Relocation

Safety-of-flight message

October 99

AH-1-00-01: Retention Fitting Inspection
CH-47-00-01: T-62T-2B Auxiliary Power Unit

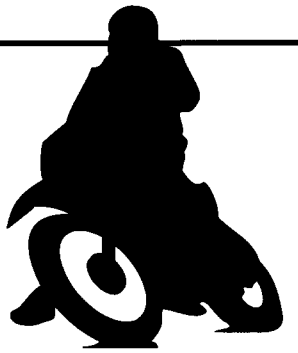
November 99

AH-64-00-01: Inspect Basic Configuration Hangar Bearings
AH-64-00-02: Inspect Main Transmission
CH-47-00-02: T-62T-2B Auxiliary Power Unit

December 99

AH-1-00-02: Interim Retirement Life – Impeller
AH-64-00-03: Inspect Main Transmission
AH-64-00-04: Inspect Basic Configuration Hangar Bearings
CH-47-00-03: Gear/Bearing Assemblies
UH-1-00-01: Interim Retirement Life – Impeller

Don't have one of these? Log onto the Risk Management Information System (http://rmis.army.mil). Your ASO or commander should have a password.



POV Fatalities through 30 Nov

FY99	FY98	3-yr Avg
14	24	18

HIGH-RISK PROFILE

Age & Rank:
19-23, E1-E4, O1, O2
Place:
Two-lane rural roads
Time:
Off-duty, 1100-0300
Friday & Saturday nights

TRENDS

1. No seatbelt or helmet
2. Too fast for conditions
3. Fatigue
4. Motorcycle accidents up

IN THIS ISSUE

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FY99 Aviation Accidents through 30 November

		Class A	Class B	Class C	Total
ACCIDENTS	Total* Avn Acdts	3	4	15	22
	Flight Acdt Rate	2.11	2.11	8.45	12.67
RATE COMPARISON	FY99 vs. FY98	50 %	200 %	20 %	38 %
	FY99 vs. 3-yr avg	4 %	20 %	4 %	4 %
Aviation Military Fatalities					2

* Includes Flight, Flight-related, and Ground

U.S. ARMY SAFETY CENTER

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Gene M. LaCoste
Brigadier General, USA
Commanding